West Kentucky 2019 Subsidence High Priority AML Reclamation Project

Hopkins & Muhlenberg Counties Project Description

The proposed project consists of the reclamation of subsidence problems at two site locations in West Kentucky. The project will involve drilling and grouting to stabilize the general areas at each site.

The Smith site, approximately 1.7 acres, involves cracking within the driveway and house foundation. The Smith site is located in Hopkins County, within the Madisonville West Quadrangle, at 37° 17′ 33″ N, 87° 30′ 46″ W. The address is 2619 Wesco Drive, Madisonville, KY.

The Shingledecker site, approximately 1.9 acres, involves cracking within the county roadway and residential yard. The Shingledecker site is located in Muhlenberg County, within the Greenville Quadrangle, at 37° 14′ 37" N, 87° 9′ 45" W. The address is 204 Redbud Lane, Powderly, KY.

The proposed project will use drilling & grouting to stabilize the WKY No. 9 coal seam that has been deep mined at the two sites. Grout will be injected underground into the void spaces via a borehole in 30cy intervals beginning at the bottom of the coal seam. The holes will be grouted to refusal. Spacing of the holes will be around the perimeter of the structures to be protected on a 40'-50' interval. Pilot holes will be drilled following injection between the holes to insure that the void spaces have been filled.

Project reclamation work will take place in areas significantly disturbed by residential construction, coal mining operations, utility installation, and/or road construction. These disturbances consist of significant upheaval, mixing, and removal of earthen material from deep excavation, grading, sub-surface drilling, fill material placement, and erosion. There should be no undisturbed earthen material to a depth of several feet at the areas slated for significant project-related construction activities.

Construction disturbances will be kept to a minimum through the use of a stringently formulated sediment and erosion control program. Hay-bales and/or silt fence will be installed throughout the life of the project, and prompt re-vegetation using agricultural limestone, fertilizer, seed, filter fabric, and mulch will take place on areas disturbed by the project. No work will occur within any streams, and the removal of trees over 3" in diameter at breast height is not anticipated.

Access for the project is via county roads and residential driveways and yards. This project will include pre- and/or post- project maintenance and repair of existing previously constructed public county roads utilized during the construction of this project, which are administered by the county or local road authority. This construction activity will be conducted under the authority and supervision of the local public road authority and will consist of standard road construction practices appropriate to mitigate impacts to the local community from potential degraded road conditions in order to maintain public traffic safety.